United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 I L 0 0 3 8 7 0 9 11	12 8 7 1 0 2 1 17	18 C	19 5	20 2

Remarks

21 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 4	71 D	72 N	73 74	75 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Pfizer Pigments, Inc. 2001 Lynch Ave. East St. Louis IL	☑ AM ☐ PM	5-31-84
	Exit Time/Date	Permit Expiration Date: 4-15-89

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Jeff Carlton	Safety/Envir. Engineer	271-4700

Name, Address of Responsible Official	Title	Contacted
Roger Rader	Plant Manager	☑ Yes ☐ No
	Phone No.: 618-271-4700	

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N/A	Pretreatment	S	Operations & Maintenance
S	Records/Reports	S	Laboratory	N/A	Compliance Schedules	N/A	Sludge Disposal
S	Facility Site Review	S	Effluent/[redacted]s	S	Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments *(Attach additional sheets if necessary)*

RECEIVED
Compliance Assurance Section
FEB 22 1988
Environmental Protection Agency
STATE OF ILLINOIS

EPA Region 5 Records Ctr.
390918

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
J. N. Mahlandt, PE	IEPA Region 6 618-345-6220	2-18-88

Signature of Reviewer	Agency/Office	Date
Robert L. Schleuger, P.E.	IEPA/Collinsville/618-345-6220	2/19/88

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

PFIZER, INC. COOLING WATER

COMPLIANCE SAMPLING INSPECTION

Date: October 21, 1987

Interviewed: Mr. Jeff Carlton, Environmental Engineer

NPDES Permit: IL0038709 (modified 7-21-86)

Basin Code: JNG-02-163

FINDINGS

This permit covers the discharge of approximately 2.2 mgd (1540 gpm) of non-contact cooling water to the storm sewer system tributary to Schoenberger Creek. Pfizer also discharges to the East St. Louis collection system via three sewer connections along Lynch Avenue. Pre-treatment is provided for process wastewater and consists of neutralization and sedimentation. This system was in operation, however, it was not viewed in detail since it is not part of the subject permit.

The source of the cooling water is three wells located toward the rear of the plant property. These are noted as #12, #14, and #15 with capacities of approximately 500, 1000, and 1550 gpm, respectively. No other water source is included in the cooling loop. During the visit, wells #12 & #14 were in service.

This water is distributed to the Yellow and the Kroma buildings and then returned through various collection tanks and pumps to the main collection tank. Conductivity probes are also provided at various points in this loop. Mr. Carlton commented that the corporate appropriation has been made and the Magnetics building has been added to the system. This was done this past summer.

Following the final collection tank, the returned flow passes through a Parshall flume and is discharged to the storm sewer. It is at the flume that the required grab sampling is done. During the inspection the flow was clear, however, shortly after collection the oxidation from the ferrous to the ferric state became evident. Attached is a copy of laboratory report sheet B717126, which indicates that the daily maximum for TSS was exceeded by one mg/l (38 vs. 37). On October 19th, another effluent grab sample was taken and this had a 46 mg/l result. This is noted on laboratory report sheet B717125. The other permit parameters were in compliance on both sample results. These results were received in this office on February 16th.

During the compliance inspection a grab sample was also collected from the two operating wells. These results are noted on the attached laboratory report sheets B717127 and B717128. On both results the iron level is below the effluent limitation while the TSS results are near or above. In all sampling at this facility, the TSS result is a function of time due to the ferrous to ferric conversion.

RECORDS & REPORTS

The cooling water discharge is routinely sampled with the water transported and analyzed by Environmental Analysis of Florissant, Missouri. These samples are reportedly analyzed the same day and if a problem is noted, Pfizer is immediately notified by telephone. Analysis records are maintained by Mr. Carlton and the monthly discharge monitoring report is received in a timely manner. Notices of non-compliance have been received when required.

Prior to July 31, 1987, Pollution Control Board Order 85-107 was in effect. This variance allowed a daily maximum of 34 mg/l for iron and 98 mg/l for TSS. For the first seven months of 1987, the reported DMR average maximum values were Fe - 18.1, Oil - 2.5, and TSS - 40. For the next three months, these values were Fe - 16.9, Oil - 2.2, and TSS - 22. The overall 1988 averages (Jan. - Oct.) were Fe - 17.7, Oil - 2.4, and TSS - 34. A 6.4 to 8.2 pH range was reported.

SUMMARY

The Pfizer cooling water discharge routinely meets the permit limitations for oil, pH, and iron. Based on the Company's reports, compliance has also been achieved for TSS. Even though our previously noted results show permit non-compliance, they are not indicative of the situation. At the time of discharge, the effluent on October 21st had a TSS of approximately 23 while on October 19th the effluent TSS was approximately 32.

This CSI was scheduled as part of a biomonitoring study on the cooling water discharge. This effort was cut short due to the receiving stream showing a toxic effect on the control species. No effluent toxicity was reported on the daphnia nor the fathead minnow. An inhibition was reported for algal growth. The receiving stream above the Pfizer discharge has for years been used as an open dump. It is silted and choked with garbage and refuse.

J. N. Mahlandt

J. N. Mahlandt, P.E.

JNM:cas/0060W
Attachments

cc: DWPC - Collinsville
cc: DWPC/CAS - Gary Whiteside

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B717126
SAMPLING POINT DESC. : PFIZER INC

SUBMITTING SOURCE # : JNG 16302 SITE # :
DATE COLLECTED : 871021 TIME COLLECTED : 1000 SAMPLING PROGRAM : IN

COLLECTED BY : JNM DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : WPC6 AGENCY ROUTING : CV UNIT CODE :
SAM TYPE CODE : CLGW SAMPLE PURPOSE CODE : X REPORTING INDICATOR : B

DATE RECEIVED : 871022 TIME RECEIVED : 1100 RECEIVED BY : MAD
LAB OBSERVATIONS : TRIP BL SAM# : SS/10/
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

P00403 PH-LABORATORY	UNITS : 7.5	P00530 SOLIDS,TOT.SUS.	MG/L : 38
P00556 OIL,GRAVIMETRIC	MG/L : 1	P01045 IRON,TOTAL	UG/L : 14686

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B717127
SAMPLING POINT DESC. : PFIZER WELL 12

SUBMITTING SOURCE # : SITE # :
DATE COLLECTED : 871021 TIME COLLECTED : 1010 SAMPLING PROGRAM : IN

COLLECTED BY : JNM DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : WP06 AGENCY ROUTING : CV UNIT CODE :
SAM TYPE CODE : CLGW SAMPLE PURPOSE CODE : X REPORTING INDICATOR : B

DATE RECEIVED : 871022 TIME RECEIVED : 1100 RECEIVED BY : MAD
LAB OBSERVATIONS : TRIP BL SAM# : SS/10/
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

P00403 PH-LABORATORY UNITS : 7.4 P00530 SOLIDS,TOT.SUS. MG/L : 34
P01045 IRON,TOTAL UG/L : 13092

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 8717128
SAMPLING POINT DESC. : PFIZER WELL 14

SUBMITTING SOURCE # : SITE # :
DATE COLLECTED : 871021 TIME COLLECTED : 1020 SAMPLING PROGRAM : IN

COLLECTED BY : JNM DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : WP06 AGENCY ROUTING : CV UNIT CODE :
SAM TYPE CODE : CLGW SAMPLE PURPOSE CODE : X REPORTING INDICATOR : B

DATE RECEIVED : 871022 TIME RECEIVED : 1100 RECEIVED BY : MAD
LAB OBSERVATIONS : TRIP BL SAM# : SS/10/
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

P00403 PH-LABORATORY UNITS : 7.4 P00530 SOLIDS,TOT.SUS. MG/L : 52
P01045 IRON,TOTAL UG/L : 17200

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B717125
SAMPLING POINT DESC. : PFIZER INC

SUBMITTING SOURCE # : JNG 16302 SITE # :
DATE COLLECTED : 871019 TIME COLLECTED : 0945 SAMPLING PROGRAM : IN

COLLECTED BY : JNM DELIVERED BY : UPS
COMMENTS :
FUNDING CODE : WP06 AGENCY ROUTING : CV UNIT CODE :
SAM TYPE CODE : CLGW SAMPLE PURPOSE CODE : X REPORTING INDICATOR : B

DATE RECEIVED : 871022 TIME RECEIVED : 1100 RECEIVED BY : MAD
LAB OBSERVATIONS : TRIP BL SAM# : SS/10/
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

P00403 PH-LABORATORY UNITS : 7.6 P00530 SOLIDS,TOT.SUS. MG/L : 46
P01045 IRON,TOTAL UG/L : 14210

EPA

United States Environmental Protection Agency
Washington, D. C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N	2 5 3 I L 0 0 3 8 7 0 9 11	12 8 6 0 4 1 5 17	18 C	19 S	20 2

Remarks: 21 PERMIT BEING MODIFIED 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 4	71 N	72 N	73 74	75 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Pfizer, Inc 2001 Lynch Ave East St Louis IL 62201	9 AM ☐ PM	5-31-84
	Exit Time/Date	Permit Expiration Date: 4-15-89

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Jeff Carlton	Safety / Envir Engineer	618-271-4700

Name, Address of Responsible Official	Title	Phone No.	Contacted
Roger Rader	Plant Manager	Same	☐ Yes 4 No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N/A	Pretreatment	S	Operations & Maintenance
S	Records/Reports	S	Laboratory	N/A	Compliance Schedules	N/A	Sludge Disposal
S	Facility Site Review	S	Effluent/Receiving Waters	S	Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

RECEIVED
Compliance Assurance Section
JUN 27 1986
Environmental Protection Agency
STATE OF ILLINOIS

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
J.N. Mallanaft, PE	IEPA Region 6 618-345-6220	6-26-86

Signature of Reviewer	Agency/Office	Date

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

PFIZER, INC. COOLING WATER

Compliance Sampling Inspection

Date: April 15, 1986

Interviewed: Mr. Jeff Carlton, Environmental Engineer

FINDINGS

Permit #IL0038709 covers the discharge of approximately 2.2 mgd (1540 gpm) of non-contact cooling water. The source of this water is wells located toward the rear of the plant property. Three wells are involved and these are noted as #12, #14, and #15. The capacities are 500, 1000, and 1550 gpm, respectively.

This water is distributed to the Yellow and the Kroma buildings and then returned through various collection tanks and pumps to the main collection tank. Conductivity probes are also provided in this collection loop. According to Mr. Carlton, one probe is presently inoperable. A new unit was ordered, however, the wrong one was sent and has been returned. He expects the correct one to be delivered and installed within the next two to three weeks. All other equipment was functioning properly.

During the inspection only the #15 well was in operation. According to Mr. Carlton, the other two will not supply the required water at this time. It is the #15 well, which for some reason contains a higher iron concentration, that has apparently caused a routine violation of the permit discharge limits. Attached are copies of laboratory report sheets B605424 and B605425. As can be seen, the iron is not being picked up from the cooling process.

Pfizer petitioned the Pollution Control Board for a variance to cover the iron and subsequent total suspended solids excursions. The variance, PCB 85-107, was granted on March 14, 1986 and allows the discharge concentrations to be 34 mg/l for Fe and 98 mg/l for TSS until July 31, 1987. Based on these limits, the inspection sample results are in compliance. The NPDES Permit is presently being modified to incorporate the variance limits and schedules.

RECORDS & REPORTS

Samples are collected by company personnel and analyzed by contract laboratory. Laclede was being used, however, they recently closed and Environmental Analysis is currently doing the work. Analysis records are maintained by Mr. Carlton and the monthly report prepared.

Discharge monitoring reports are routinely received in a timely manner.

RECOMMENDATIONS

All equipment, except the one probe which is in the process of being replaced, was in service and functioning properly. No recommendations are therefore necessary. Further study and reporting requirements are dictated by the variance.

J. N. Mahlandt

J. N. Mahlandt, P.E.

JNM:cas
attachments

cc: DWPC - Collinsville
cc: DWPC/CAS - Mike Severns

ENVIRONMENTAL PROTECTION AGENCY — Sample # 40 — DIVISION OF WATER POLLUTION CONTROL

WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM

SAMPLE COLLECTED BY: M. Claudt
LOCATION OF SAMPLING POINT: [illegible], Inc

BASIN: [illegible] | SUB-BASIN (IF NONE ENTER "DIRECT") | TRIBUTARY | MINOR TRIBUTARY

SEND ORIGINAL OF RESULTS TO: [illegible] SUB-BASIN OFFICE ☐ PERFORMANCE MEASUREMENT SECTION, SPRINGFIELD

SEND COPY OF RESULTS TO: ☒ EDP SERVICES SECTION, SPRINGFIELD

CARD NO. 1	CARD NO. 2	CARD NO. 3
2–5 INS BASIN CODE	6–7 02 PLANT OR STATION NO.	8–10 163 FIPS COUNTY CODE (USE ONLY FOR PLANTS)
11–17 B[illegible]424 LAB ID NO.	11–17 B[illegible]424 LAB ID NO.	11–17 B[illegible]424 LAB ID NO.
18 E SAMPLE TYPE CODE (SEE LIST BELOW)	18 E SAMPLE TYPE CODE	18 E SAMPLE TYPE CODE

Card No. 1

Col.	Value	Item
19–20	[illegible]	YEAR
21–22	04	MONTH
23–24	15	DAY
25–26	12	HOUR (NEAREST)
27	[illegible]	TIME OF DAY (A,P,N,)
28–30		WATER TEMPERATURE (DEG. F.)
31–33		FIELD D.O.
34–36	7.5	PH (UNITS)
37–40		TOTAL PHOSPHORUS
41–44		AVG. BOD.
45–48		C.O.D.
49–52		PHENOLS
53–59		FECAL COL I (NO./100ML)
60–63		AMMONIA N
64–66		NITRATE + NITRITE AS N
67–69		ORGANIC N
70–72		TOTAL N
73–76		T.D.S./E C.
77–80	50	TOTAL SUSP. SOLIDS

Card No. 2

Col.	Item	Value
19–22	ARSENIC	
23–25	BARIUM	
26–28	BORON	
29–32	CADMIUM	
33–35	CHROMIUM (HEX)	
36–38	CHROMIUM (TRI)	
39–41	CHROMIUM (TOTAL)	
42–45	COPPER	
46–49	CYANIDE	
50–53	IRON (TOTAL)	17
54–56	IRON (DISSOLVED)	
57–60	LEAD	
61–63	MANGANESE	
64–66	MERCURY (MICROGM/L)	
67–69	NICKEL	
70–72	SELENIUM	
73–76	SILVER	
77–79	ZINC	

ALL RESULTS EXPRESSED AS MG/L EXCEPT WHERE OTHERWISE STATED.

Card No. 3

Col.	Item	Value
19–23	PLANKTON (NO./ML)	
24–26	FLUORIDE	
27–30	CHLORIDE	
31–34	SULFATE AS SO4	
35–38	TOTAL SULFUR AS S	
39–42	OIL	
43–46	M.B.A.S.	
47–50	CARBON CHLOROFORM EXTRACT	
51–54	TURBIDITY (UNITS)	
55–58	RESIDUE ON EVAPORATION	
59–62	VOLATILE SUSP. SOLIDS	
63–65	COLOR (UNITS)	
66–68	HARDNESS	
69–71	ALKALINITY	
72–74	TOTAL ACIDITY	
75–77	FREE [illegible]	

RECEIVED
IL Environmental Protection Agency
MAY 27 1986
Division of Water Pollution Control
Field Operations Section — Reg. VI

OTHER TESTS REQUIRED — RESULTS

PHYSICAL OBSERVATIONS & COMMENTS (ABNORMAL COLOR, ODOR, FLOATING MATTER, OIL, SLUDGE, TURBIDITY, WEATHER), LOCATION OF SAMPLING POINT:
clear @ collection - no oxidation started shortly thereafter

SAMPLE TYPE CODES:

- A = DOMESTIC WASTE ONLY
- E = INDUSTRIAL WASTE ONLY
- I = MIXED DOMESTIC & INDUSTRIAL WASTE
- S = STREAM, LAKE, OR RECEIVING WATER QUALITY
- T = MINE DRAINAGE OR WASTE
- X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY: M. Claudt
RECEIVED BY: ______ TIME ______
TRANSPORTED BY: ______
RECEIVED BY: ______ TIME ______

FOR LABORATORY USE ONLY

SAMPLE RECEIVED BY: [signature]
DATE REC'D: APR 17 1986 TIME REC'D: 11A
DATE ANALYSES COMPLETED: ______
DATE RESULTS FORWARDED: MAY 22 1986
TOTAL TESTS REQUESTED ______ TESTS RUN ______
LAB SECTION: CHAMPAIGN SUPERVISOR: [signature]

IL 532-0006
WPC 129a 6/80

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY--DIVISION OF WATER POLLUTION CONTROL

SPECIAL ANALYSIS FORM Sample # 4-1

Time Collected 10:10 A Sub-Basin Collinsville

Date Collected 4-15-86 Collector Hubbard

Facility Name: Facility Number: File Town

Plater Inc E St Louis

Stream Name(s) Stream Code:

Source of Sample: (Exact Location)

sample tap on Well # 15

Physical Observations, Remarks:

water clear @ sampling - Fe oxidation started shortly thereafter

Flow	Field Dissolved Oxygen	Field pH	Field Temp.

Arsenic	Coliform/100ml	BOD
Barium	Fecal Coliform 100 ml	COD
Boron	Fecal Strep 100 ml	TS/EC
Cadmium	Algae (Total) /ml	68. Susp. Solids
Copper	Ammonia (N)	Vol. Susp. Solids
Chromium (tri)	Organic Nitrogen (N)	7.3 pH (units)
Chromium (hex)	Nitrate + Nitrite(N)	Turbidity (JTU)
17. Iron (Total)	Phosphorus (P)	Hardness
Iron (Dissolved)	Chloride	Alkalinity
Lead	Fluoride	Total Acidity
Manganese	Sulfate	Free Acidity
Mercury (ppb)	Cyanide	Oil
Nickel	MBAS	Other (Specify)
Selenium	Phenol (ppb)	
Silver		
Zinc		

RECEIVED
IL Environmental Protection Agency
MAY 27 1986
Division of Water Pollution Control
Field Operations Section — Reg. VI

Results in mg/l unless otherwise noted.

100% Recycled Paper

Transported by: Hubbard

Received by:

Transported by:

Received by:

FOR LAB USE ONLY

Lab Number: B505425 Rec'd by: pd

Date sampled: APR 17 1986 Time: 11A

Date analysis completed:

Date results forwarded: MAY 22 1986

Total Tests requested: Tests run:

Lab Section: CHEMISTRY Supervisor:

3/73 LAB-3

United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

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OMB No. 2040-0003
Approval Expires 7-31-85

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Remarks

21 ____ 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved
67 ___ 69	70 4	71 N	72 N	73 ___ 74 75 ___ 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time / Exit Time/Date	Permit Effective Date / Permit Expiration Date
Pfizer Pigments, Inc. 2001 Lynch Ave. East St Louis, IL 62201	Entry Time ☐ AM ☒ PM Exit Time/Date -	Permit Effective Date: 5-31-84 Permit Expiration Date: 4-15-89

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Jeff Carlton	Safety / Envir. Engineer	618-271-4700

Name, Address of Responsible Official	Title	Phone No.	Contacted
Roger Rader	Plant Manager	Same	☐ Yes ☒ No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

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S	Records/Reports	S	Laboratory	M	Compliance Schedules	N/A	Sludge Disposal
S	Facility Site Review	S	Effluent/Receiving Waters	S	Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

See attached notes

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
J. N. Mahlandt, PE	IEPA Region 6 618-345-6220	3-3-87
Signature of Reviewer	Agency/Office	Date

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

PFIZER, INC. COOLING WATER

COMPLIANCE SAMPLING INSPECTION

Date: December 3, 1986

Interviewed: Mr. Jeff Carlton, Environmental Engineer

NPDES Permit: IL0038709 (modified 7-21-86)

Basin Code: JNG-02-163

FINDINGS

This permit covers the discharge of approximately 2.2 mgd (1540 gpm) of non-contact cooling water to the storm sewer system tributary to Schoenberger Creek. Pfizer also discharges to the East St. Louis collection system via three sewer connections along Lynch Avenue. Pre-treatment is provided for process wastewater and consists of neutralization and sedimentation. This system was in operation, however, it was not viewed in detail since it is not part of the subject permit.

The source of the cooling water is three wells located toward the rear of the plant property. These are noted as #12, #14, and #15 with capacities of approximately 500, 1000, and 1550 gpm, respectively. No other water source is included in the cooling loop. During the visit only well #15 was in service.

This water is distributed to the Yellow and the Kroma buildings and then returned through various collection tanks and pumps to the main collection tank. Conductivity probes are also provided at various points in this loop. Mr. Carlton commented that the corporate appropriation has been made and the Magnetics building is to be added to the system. He felt it would be connected this spring or early summer.

Following the final collection tank, the returned flow passes through a Parshall flume and is discharged to the storm sewer. It is at the flume that the required grab sampling is done. During the inspection the flow was clear, however, shortly after collection the oxidation from the ferrous to the ferric state became evident. Attached is a copy of laboratory report sheet B619556, which indicates compliance with the current permit limits. The flow rate was 1400 gpm.

RECORDS & REPORTS

Samples are collected at the prescribed intervals by company personnel and analyzed by contract laboratory. Environmental Analysis is presently being used. The results of QA-006 indicate all parameter values to be within the acceptable range. Analysis records are maintained by Mr. Carlton and the monthly discharge monitoring report is received in a timely manner.

Notices of non-compliance have been submitted when required. With the present permit limits, these have been virtually unnecessary. Condition #6 of PCB 85-107 requires the company to file progress reports every six months. The two 1986 reports have also been received in a timely manner.

RECOMMENDATIONS

The variance, and its incorporation into the NPDES permit, expires on July 31, 1987. At that time the effluent limits revert back to TSS - 37 and Fe - 20. It is therefore necessary for Pfizer to finalize what treatment will be installed, discontinue the permitted discharge, or request an extension of the variance.

J. N. Mahlandt

J. N. Mahlandt, P.E.

JNM:cas
Attachment

cc: DWPC - Collinsville
cc: DWPC/CAS - Mike Severns

Sample # 52

ENVIRONMENTAL PROTECTION AGENCY

DIVISION OF WATER POLLUTION CONTROL

WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM

SAMPLE COLLECTED BY: Mahlandt

LOCATION OF SAMPLING POINT: Pfizer Cooling Water Discharge

BASIN: Mississippi

SUB-BASIN (IF NONE ENTER "DIRECT"):

TRIBUTARY:

MINOR TRIBUTARY:

SEND ORIGINAL OF RESULTS TO: Collinsville SUB-BASIN OFFICE ☐ PERFORMANCE MEASUREMENT SECTION, SPRINGFIELD

SEND COPY OF EOP SERVICES RESULTS TO: ☒ SECTION, SPRINGFIELD

CARD NO. 1

CARD COL.		
1		CARD NO. 1
2–9	JNG	BASIN CODE
11–17		LAB ID NO.
18	E	SAMPLE TYPE CODE (SEE LIST BELOW)
19–20	86	YEAR
21–22	12	MONTH
23–24	03	DAY
25–26	02	HOUR (NEAREST)
27	P	TIME OF DAY (A,P,N,)
28–30		WATER TEMPERATURE (DEG. F.)
31–33		FIELD D.O.
34–36	7.0	PH (UNITS)
37–40		TOTAL PHOSPHORUS
41–44		AVG. BOD.
45–48		C.O.D.
49–52		PHENOLS
53–59		FECAL COL. (NO./100ML)
60–63		AMMONIA N
64–66		NITRATE + NITRITE AS N
67–69		ORGANIC N
70–72		TOTAL N
73–76		T.D.S./E.C.
77–80	31	TOTAL SUSP. SOLIDS

CARD NO. 2

CARD COL.		
1	2	CARD NO. 2
6–7	02	PLANT OR STATION NO.
11–17		LAB ID NO.
18	E	SAMPLE TYPE CODE
19–22		ARSENIC
23–26		BARIUM
27–28		BORON
29–32		CADMIUM
33–36		CHROMIUM (HEX)
36–38		CHROMIUM (TRI)
39–41		CHROMIUM (TOTAL)
42–45		COPPER
46–49		CYANIDE
50–53	1.5	IRON (TOTAL)
54–56		IRON (DISSOLVED)
57–60		LEAD
61–63		MANGANESE
64–66		MERCURY (MICROGM/L)
67–69		NICKEL
70–72		SELENIUM
73–76		SILVER
77–79		ZINC

ALL RESULTS EXPRESSED AS MG/L EXCEPT WHERE OTHERWISE STATED.

CARD NO. 3

CARD COL.		
1	3	CARD NO. 3
8–10	163	FIPS COUNTY CODE (USE ONLY FOR PLANTS)
11–17	B619356	LAB ID NO.
18	E	SAMPLE TYPE CODE
19–23		PLANKTON (NO./ML)
24–26		FLUORIDE
27–30		CHLORIDE
31–34		SULFATE AS SO4
33–36		TOTAL SULFUR AS S
39–42	0.	OIL
43–46		M.B.A.S.
47–50		CARBON CHLOROFORM EXTRACT
51–54		TURBIDITY (UNITS)
55–58		RESIDUE ON EVAPORATION
59–62		VOLATILE SUSP. SOLIDS
63–65		COLOR (UNITS)
66–68		HARDNESS
69–71		ALKALINITY
72–74		TOTAL ACIDITY
75–77		FREE ACIDITY

RECEIVED IEPA JAN 15 1987 COLLINSVILLE OFFICE

OTHER TESTS REQUIRED — RESULTS

PHYSICAL OBSERVATIONS & COMMENTS (ABNORMAL COLOR, ODOR, FLOATING MATTER, OIL, SLUDGE, TURBIDITY, WEATHER), LOCATION OF SAMPLING POINT:

grab samples @ 1:50 pm
clear Q - 1400 gpm

SAMPLE TYPE CODES:

A = DOMESTIC WASTE ONLY
E = INDUSTRIAL WASTE ONLY
I = MIXED DOMESTIC & INDUSTRIAL WASTE
S = STREAM, LAKE, OR RECEIVING WATER QUALITY
T = MINE DRAINAGE OR WASTE
X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY: Mahlandt

RECEIVED BY: _____ TIME: _____

TRANSPORTED BY: _____

RECEIVED BY: _____ TIME: _____

FOR LABORATORY USE ONLY

SAMPLE RECEIVED BY: MP

DATE REC'D: DEC 04 1986 TIME REC'D: 17 AM PM

DATE ANALYSES COMPLETED: _____

DATE RESULTS FORWARDED: JAN 12 1987

TOTAL TESTS REQUESTED: _____ TESTS RUN: _____

LAB SECTION: CHAMPAIGN SUPERVISOR: _____

IL 532-0006
WPC 129a 6/80

P/U

United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 I L 0 0 3 8 7 0 9 11	12 8 7 0 2 0 4 17	18 R	19 5	20 2

Remarks

21 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved
67 69	70	71 N	72 N	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time / Exit Time/Date	Permit Effective Date / Permit Expiration Date
Pfizer Pigments, Inc 2001 Lynch Ave East St Louis 62201	☑ AM ☐ PM	5-31-84 4-15-89

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Jeff Carlton	Safety/Envir. Engineer	618-271-4700

Name, Address of Responsible Official	Title / Phone No.	Contacted
Roger Rader	Plant Manager same	☑ Yes ☐ No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

	Permit		Flow Measurement		Pretreatment		Operations & Maintenance
	Records/Reports		Laboratory		Compliance Schedules		Sludge Disposal
	Facility Site Review		Effluent/Receiving Waters		Self-Monitoring Program	U	Other: Spill Containment

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

RECEIVED
Compliance Assurance Section
FEB 11 1987
Environmental Protection Agency
STATE OF ILLINOIS

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
J. W. Mehlandt, PE	IEPA Region 6 618-345-6220	2-5-87
Signature of Reviewer	Agency/Office	Date
Robert L. Schlegel, P.E.	IEPA/Chainsville/618-345-6220	2/9/87

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

M E M O R A N D U M

ST. CLAIR COUNTY - Pfizer Pigments, Inc.
Acid Line Rupture
American Bottoms WWTP

TO: Division of Water Pollution Control, FOS & Records Unit

FROM: J. N. Mahlandt, P.E. - Region VI, Collinsville

DATE: February 4, 1987

INTERVIEWED: Mr. Jeff Carlton
Mr. Roger Rader

On the above date, Tom Powell, ERU, and the writer met with Mr. Carlton to view the location of the January 26th sulfuric acid spill. The matter was later briefly discussed with Mr. Rader. Mr. Carlton discussed this spill with the writer on January 29th and at that time it was suggested that a written report be prepared. Attached is a copy of that report.

The acid discharge to the southeast in-plant sewer reportedly occurred during the transfer of acid from the #620 storage tank to the #70 reactor unit tank. Although a leak in the 400 gpm transfer pump discharge line contributed to the spill, the majority was lost through a rupture of the suction line. This is 4 in. schedule 80 PVC line. The broken pipe section was viewed and it contained a three directional split of approximately 6 to 8 inches. Mr. Carlton stated that sometime prior to the break, workmen had thawed this line using a torch. He felt that this may have weakened the line and led to the incident. In viewing the pipe system, the writer found another length which apparently had also been heated. This was pointed out and suggested for replacement. Mr. Carlton agreed.

A pH monitor system is located on the southeast sewer prior to discharge to the East St. Louis system. A small pump is located in the sewer with the discharge to a sample box. Composite samples and continuous pH readings are taken at this box. According to Mr. Carlton, the pH meter and probe are checked and calibrated weekly. Reportedly this sampling line and box were frozen during the event, so no alarm was sounded. A heater is now present in the small metal building housing this equipment.

The spill occurred at approximately 6:00 PM on the 26th and was not promptly reported due to an apparent failure of the company's internal communication. According to Mr. Rader, this is to be re-emphasized at the upcoming supervisor's meeting. It was also noted during the inspection that virtually anything spilled outside will reach the combined sewer inlet grating. No catchment sumps nor containment berms were noted

J. N. Mahlandt

JNM:cas/0021W
Attachments

cc: DWPC - Collinsville
cc: DWPC/CAS - Mike Severns
cc: OEM - Collinsville

PFIZER PIGMENTS INC.
A subsidiary of Pfizer Inc.
2001 Lynch Avenue, East St. Louis, Ill. 62205

February 2, 1987

Mr. George Schillinger, Plant Manager
American Bottoms Regional Wastewater Treatment Plant
2897 Falling Springs Road
Sauget, IL 62206

Dear Mr. Schillinger:

During the evening of January 26, Pfizer Pigments Inc. released approximately 4000 gallons of 47% sulfuric acid to the East St. Louis City Sewer System. Due to a supervisor's error, the release was not reported to plant management until after your phone call of January 28. The details of the incident are as follows:

An operator was transferring 47% sulfuric acid from a storage tank to a reactor when the flow to the reactor suddenly stopped. The operator traced the line back to the acid pump, noticed that the feed hose to the pump had been leaking, and shut the pump off. This acid had flowed to a trench leading directly to the Southeast sewer system. The operator and his supervisor then went back to the storage tank and saw that the discharge line from the tank to the pump had ruptured. The acid from the ruptured line traveled across an asphalted area to a manhole and then into the SE sewer. They shut the discharge valve from the tank to stop the flow, then spread lime around the area to neutralize the acid. Lime was also added directly to the sewer to neutralize any acid that had already reached the sewer system.

The supervisor decided that he did not need to contact anyone since he believed that he had neutralized the spill. Therefore, neither his department manager nor I were notified of the spill. However, the supervisor failed to consider either the amount that had leaked from the pump or the total amount that had spilled through the ruptured line.

At the time of the incident, the Southeast Sewer monitoring point which records pH of the effluent leaving the plant was frozen due to the cold weather. Consequently, no alarm was noted or record retained of any substandard pH material leaving the plant. An alarm would have triggered additional actions to neutralize the spill.

After your call to our Mr. Jeff Carlton on January 28, we learned that we had had a major acid spill. Mr. Carlton gave you this information on the afternoon of January 28. At this time, he also attempted to contact Nick Mahlandt from the Collinsville office of the IEPA.

Mr. Mahlandt returned Mr. Carlton's call on January 29. He explained the incident to him at that time. Afterwards, he also contacted Mr. Ken Mensing (IEPA - Land Division - Collinsville) as well as the National Response Center and the Illinois Emergency Services Disaster Agency in Springfield, as suggested by Mr. Mahlandt and Mr. Mensing.

At this time, we have and are taking actions to prevent a recurrence of this incident.

Sincerely,

Roger E. Rader
Plant Manager

cc: Illinois EPA
Compliance Assurance Unit

J. C. Carlton
BCC: W. E. McCoy